

# PATENT ABSTRACTS OF JAPAN

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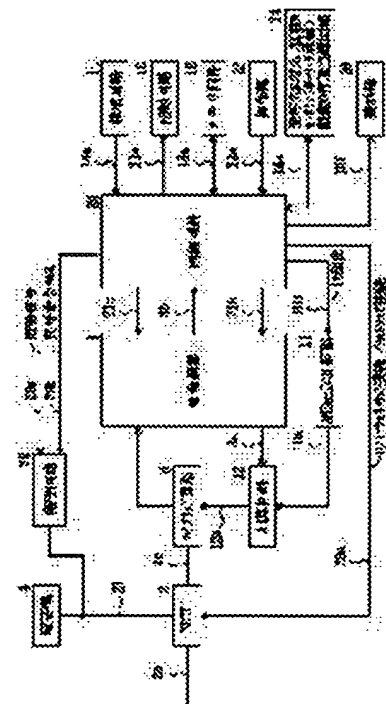
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## (54) COMMUNICATION EQUIPMENT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To allow the equipment to conduct smoothly plural kinds of selective polling communication to various destinations by making dialing to a destination when the destination is capable of plural kinds of selective polling communication and displaying it and conducting no dialing when the destination is not capable of plural kinds of selective polling communication.

**SOLUTION:** In the case that information through a signal line 22a is received and reception of plural kinds of selective polling is selected, the information through the signal line 22a is received and whether or not dialing is selected is discriminated. When dialing is selected, information on a signal line 24a is received and a registration circuit 24 discriminates whether or not a destination received from the information on the line 24a is capable of reception of plural kinds of selective polling. When possible, a dial circuit 28 is used to make dialing to the designated destination. On the other hand, when not possible, a message denoting it that the destination is not capable of multi-polling communication and each SEP number of received multi-polling and a designation request of polling reception of which SEP number is to be made are displayed on a display section 26.



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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to communication devices, such as facsimile apparatus in which two or more selective polling communication links are possible, especially.

[0002]

[Description of the Prior Art] Conventionally, one text was specified with the selective polling signal, i.e., an SEP signal, in 1 communication link, and polling reception from a polling transmitter was performed.

[0003]

[Problem(s) to be Solved by the Invention] By the way, carrying out polling reception of two or more texts in the inside of 1 communication link is proposed by carrying out multiple-times transmission of the SEP signal into one communication link recently.

[0004] A polling transmitter side specifies the existence of the function of two or more selective polling with a DIS signal. For example, a polling receiver side The polling transmitter side with which it specified with the DTC signal and two or more selective polling was chosen whether two or more selective polling reception is required After the polling transmission specified by the SEP signal is completed, an EOS (End of Selection) signal is transmitted instead of being an EOP signal, and a polling transmitter can specify polling reception of further others here.

[0005] However, when two or more selective polling reception was chosen in this case to the destination in which two or more selective polling communication links are impossible, there was a fault of being receiving selective polling of the text chosen as the 1st.

[0006] Then, this invention aims at offering the communication device which can perform smoothly two or more selective polling communication links among various phase hands.

[0007]

[Means for Solving the Problem] [ after having a registration means to register whether two or more selective polling communication links are possible and choosing two or more selective polling communication links corresponding to the call origination point, when invention of the 1st of this application has assignment of the call origination point ] From the information registered into said registration means, if the call origination point is the possible partner of two or more selective polling communication links, will perform dial actuation, and if the call origination point is the impossible partner of two or more selective polling communication links The purport in

which two or more selective polling communication links are impossible is displayed, and it is characterized by not performing dial actuation.

[0008] if invention of the 2nd of this application is the impossible partner of two or more selective polling communication links in the call origination point -- the purport in which two or more selective polling communication links are impossible -- in addition, it carries out shifting to dial actuation as the description by displaying two or more inputted selective polling, choosing one selective polling communication link from this inside, and specifying initiation of polling reception.

[0009] Invention of the 3rd of this application has a registration means to register whether two or more selective polling communication links are possible, corresponding to the call origination point. When two or more selective polling communication links are chosen after call origination, before receiving an initial recognition signal Based on the registration information on said registration means, the propriety of two or more selective polling communication links is judged. After receiving an initial recognition signal Based on this information, judge the propriety of two or more selective polling communication links, and if two or more selective polling communication links are possible It is characterized by performing in this one communication link, not performing the selective polling communication link after the 2nd, if two or more selective polling communication links are impossible, and displaying that.

[0010] Whenever the registration information on whether two or more selective polling communication links are possible for invention of the 4th of this application corresponding to the call origination point receives an initial recognition signal at the time of a communication link, it is characterized by updating and registering.

[0011] [ after registering whether two or more selective polling communication links are possible and choosing two or more selective polling communication links corresponding to the call origination point, when invention of the 5th of this application has assignment of the call origination point ] From said registered information, if the call origination point is the possible partner of two or more selective polling communication links, will perform dial actuation, and if the call origination point is the impossible partner of two or more selective polling communication links The purport in which two or more selective polling communication links are impossible is displayed, and it is characterized by not performing dial actuation.

[0012] A means by which invention of the 6th of this application performs two or more selective polling communication links, A means to receive the notice of whether to have two or more selective polling communication facility sent to a polling receiver from the other party polling transmitter, A means to notify whether two or more selective polling reception is required of the other party polling transmitter from a polling receiver, It is characterized by having a means to change the notice of whether to require two or more selective polling reception from a polling receiver in the means which carries out setting activation of the timer polling reception, and the time of timer polling reception and real-time polling reception.

[0013] At the time of timer polling reception, invention of the 7th of this application is characterized by requiring two or more selective polling reception of a polling transmitter side, when selective polling reception of plurality [ side / polling transmitter ] when one selective polling is chosen as the polling receiver side is not required but two or more selective polling is chosen.

[0014] At the time of real-time polling reception, invention of the 8th of this application is characterized by requiring two or more selective polling reception of a polling transmitter side, when it is which in case the case where one selective polling

is chosen as the polling receiver side, and two or more selective polling are chosen.

[0015] Invention of the 9th of this application is a correspondence procedure which notifies whether two or more selective polling reception is required of the other party polling transmitter from a polling receiver, and is with the time of timer polling reception and real-time polling reception, and it carries out [ having made the contents of a notice of whether to require two or more selective polling reception from a polling receiver change, and ] as the description.

[0016] When it was going to receive two or more selective polling in the 1st mentioned above - the 5th invention from the terminal in which two or more selective polling communication links are possible and the polling transmitter side did not have the function, that was displayed on the user, the user specified one selective polling by easy actuation, without reinputting selective polling, it became possible and it became very convenient to carry out polling reception.

[0017] Moreover, in the 3rd invention mentioned above, since a setup of the selective polling after the 2nd cannot be performed but that can be further displayed on an operator when a user chooses two or more selective polling after call origination and two or more selective polling transmitting functions cannot be found in a polling transmitter side, there is no misunderstanding of a user and it can offer the equipment which is easy to use.

[0018] Moreover, in the 4th invention mentioned above, corresponding to the call origination point, the registration information on whether two or more selective polling communication links are possible can be updated to the newest thing, and adequate decision is attained.

[0019] [ when one selective polling is chosen in the 6th mentioned above - the 9th invention ] moreover, at the time of real-time polling reception Since the addition of the selective polling reception from the communication link middle is enabled and the help is not minded on the other hand at the time of timer polling reception by requiring two or more selective polling reception of a polling transmitter side, Since it judges that there are few additions of the selective polling reception from the communication link middle and was made not to require two or more selective polling reception, it becomes the existing protocol and the fault on a protocol can be suppressed very few.

[0020]

[The gestalt and example] of implementation of invention Drawing 1 is the block diagram showing the configuration of the facsimile apparatus by the 1st and 2nd example of this invention.

[0021] In order to use a telephone network for data communication etc., it connects with the terminal of the circuit, and perform connection control of a telephone-exchange network, a change on a data communication way is performed, or NCU (network control unit)2 holds a loop formation. Moreover, NCU2 will connect telephone-line 2a to a telephone 4 side, if the signal level (signal-line 20a) from a control circuit 20 is "0", and if signal level is "1", it will connect telephone-line 2a to a facsimile apparatus side. In addition, telephone-line 2a is connected to the telephone 4 side in the normal state.

[0022] The signal of a transmitting system and the signal of a receiving system are separated, and a hybrid circuit 6 is NCU2 course, sends out the sending signal from an adder circuit 12 to telephone-line 2a, it is a receipt and signal-line 6a course in NCU2 course, and sends the signal from the other party to modulator and demodulator 8.

[0023] Modulator and demodulator 8 perform ITU-T recommendation V.8, V.21, V.27ter, V.29, V.17, the modulation based on V.34, and a recovery, and each

transmission mode is specified by signal-line 20c. This modulator and demodulator 8 input the signal currently outputted to signal-line 20b, input the input signal which outputs modulation data to signal-line 8a, and is outputted to signal-line 6a, and output recovery data to signal-line 8b.

[0024] It is the circuit which sends out an ANSam signal, the ANSam sending-out circuit 10 sends out an ANSam signal to signal-line 10a, when the signal of signal level "1" is outputted to 20d of signal lines, and when the signal of signal level "0" is outputted to 20d of signal lines, it outputs no signals to signal-line 10a.

[0025] An adder circuit 12 outputs the result of having inputted and added the information on signal-line 8a, and the information on signal-line 10a to signal-line 12a. The reading circuit 14 outputs the image of a manuscript to read, and outputs this read image data to signal-line 14a. A record circuit 16 records the information currently outputted to signal-line 20e for every line one by one.

[0026] Since the raw information on read data or the encoded information is stored and receipt information or the decrypted information is stored, a memory circuit 18 is used.

[0027] A control unit 22 has an one-touch dial, abbreviated dialing, the assignment key of polling reception, the setting key of a selective polling number, a ten key, a set key, a start key, a \*-# key, a vertical key, a right-and-left key, and other function keys, and the pushed key information is outputted to signal-line 22a.

[0028] The registration circuit 24 is a circuit which registers whether it corresponds to the call origination point of an one-touch dial and abbreviated dialing, and has the function of two or more selective polling communication links through signal-line 24a.

[0029] A display 26 displays the information currently outputted to 20f of signal lines. Although two or more selective polling reception was chosen especially, in order to display the purport which does not have this function in the other party polling transmitter or to make a user choose which selective polling is performed in this case, all set-up selective polling communication links are displayed, and it is used for the display of making one selective polling communication link choose from this inside by the easy key stroke etc.

[0030] If a call origination instruction pulse occurs in 20h of signal lines, the call origination circuit 28 will input the telephone number information currently outputted to 20g of signal lines, and will output a selection signal to signal-line 2b.

[0031] Especially in the 1st example of this invention, if the selective polling communication link of plurality [ point / call origination ] is possible for a control circuit 20 when there is assignment of the call origination point after two or more selective polling communication links are chosen, it will dial immediately. On the other hand, if the selective polling communication link of plurality [ point / call origination ] is impossible, the purport in which two or more selective polling communication links are impossible is displayed, and two or more selective polling communication links inputted further are displayed, and if initiation of the polling reception which chooses one selective polling communication link from this inside is specified, it will control to shift to dial actuation. Moreover, whenever it receives an initial recognition signal for the registration information on whether two or more selective polling communication links are possible corresponding to the call origination point at the time of a communication link, processing updated to the registration circuit 24 is performed.

[0032] Drawing 2 - drawing 5 are flow charts which show the control flow of the control circuit 20 in the 1st example of this invention.

[0033] In drawing 2, S0 expresses the start. In S2, a signal is outputted to signal level

"0" at signal-line 20a, and CML is turned off. At S4, output a signal at signal level "0", send out an ANSam signal, and there is nothing to 20d of signal lines.

[0034] In S6, the information on signal-line 22a is inputted, it judges whether two or more selective polling reception was chosen, if chosen, it will progress to S10, assignment of two or more selective polling reception is memorized, if not chosen, it will progress to S8 and others will be processed.

[0035] In S12, if it judges whether the information on signal-line 22a was inputted, and call origination was chosen and call origination is chosen, it will progress to S14, and if call origination is not chosen, it will progress to S10. In S14, the information on signal-line 24a is inputted, and it judges from the registration circuit 24, judges whether two or more selective polling reception is possible for this destination, and progresses that it is possible to S16, and if not possible, it will progress to S42.

[0036] In S16, the call origination circuit 28 is used and carries out call origination to the specified destination. In S18, the signal of signal level "1" is outputted to signal-line 20a, and CML is turned on. In S20, a pre-procedure is performed and reception of a DIS (CSI) signal etc. is performed.

[0037] In S22, it is judged whether x bits of FIF of a DIS signal are 1, since two or more selective polling transmission is possible for a polling transmitter side in it being 1, it progresses to S24, and since two or more selective polling transmission is not possible for a polling transmitter side in it being 0, it progresses to S38.

[0038] 1 is set to Counter k in S24. A SEPk(PWDk) (CIG) DTC signal is transmitted in S26. Here, as for k, a positive integer (1, 2, 3, --) is set. Moreover, it is required that the x-th bit of FIF of a DTC signal should transmit an EOS (End of Selection) signal for two or more selective polling transmission to a polling transmitter side after a demand, i.e., transmission of one text, as 1 here.

[0039] In S28, reception of DCS (TSI), a Tr-TCF signal, and DOCUMENTk is performed, and an EOS signal is received in S30. And in S32, it judges whether there is any information which carries out selective polling reception, if there is nothing, it will progress to S34, and an MCF signal is transmitted and it progresses to S2. Moreover, if it is, it will progress to S36, and one value of Counter k is incremented and it progresses to S26.

[0040] Moreover, S38 registers the purport in which the destination which carried out call origination to the registration circuit 24 now through signal-line 24a does not have the function of two or more selective polling communication links. Through 20f of signal lines, since multi-polling reception is improper, S40 displays the purport which cuts a communication link on a display 26. In addition, this display disappears by a certain key stroke.

[0041] Moreover, in S42, through 20f of signal lines, this destination displays each SEP number of the multi-polling inputted into the purport for which a multi-polling communication link is improper, and the list, and of which SEP number polling reception being performed from this inside and the purport I want you to specify are displayed on a display 26.

[0042] In S44, if the information on signal-line 22a is inputted, it judges whether an operator's key stroke occurs within 30 seconds and a key stroke occurs within 30 seconds, it will progress to S48, and if there is no key stroke within 30 seconds, it will progress to S46 and the display of a display 26 will be eliminated through 20f of signal lines.

[0043] In S48, the SEP number specified from the control unit 22 through signal-line 22a is memorized. In S50, call origination is carried out to the destination specified

through the call origination circuit 28. In S52, the signal of signal level "1" is outputted to signal-line 20a, and CML is turned on. A DIS (CSI) signal is received in S54.

[0044] And in S56, x bits of FIF of a DIS signal are 1, or it judges whether a polling transmitter side has the function which carries out two or more selective polling transmission. If there is a function x bits of FIF of a DIS signal carry out [ a function ] two or more selective polling transmission by 1, i.e., polling transmitter, side, it will progress to S66. If there is no function x bits of FIF of a DIS signal carry out [ a function ] two or more selective polling transmission by 0, i.e., polling transmitter, sides, it will progress to S58.

[0045] An SEP(PWD) (CIG) DTC signal is transmitted in S58. Here, x bits of FIF of a DTC signal are set to 0, and does not require two or more selective polling transmission.

[0046] In S60, reception of a DCS (TSI) signal, a Tr-TCF signal, and DOCUMENTk is performed, an EOP signal is received in S62 and an MCF signal is transmitted in S64.

[0047] In S66, the destination which carried out call origination to the registration circuit 24 now through signal-line 24a registers a purport with the function of two or more selective polling communication links. In S68, since two or more selective polling communication links were possible for the destination which carried out call origination now through 20f of signal lines, it displays the purport to perform on a display 26. In addition, this display disappears by a certain key stroke of an operator.

[0048] Next, the 2nd example of this invention is explained.

[0049] When two or more selective polling communication links are chosen after call origination, in this 2nd example after receiving an initial recognition signal Before receiving the existence information on two or more selective polling communication links based on this information, and an initial recognition signal Using the existence information on two or more selective polling communication links based on the registration information on said registration circuit 24 Judge the existence of two or more selective polling communication links, and if two or more selective polling communication links are possible It performs in this one communication link, if two or more selective polling communication links are impossible, the selective polling communication link after the 2nd will not be performed, and that is displayed.

[0050] Drawing 6 is a flow chart which shows a different part from the 1st example of the above among the actuation in this 2nd example.

[0051] In drawing 6, S70 expresses S4. And in S72, if the information on signal-line 22a is inputted, it judges whether call origination was chosen and call origination is chosen, it will progress to S76, and if call origination is not chosen, it will progress to S74 (S8).

[0052] In S76, call origination is carried out to the destination specified using the call origination circuit 28. In S78, the signal of signal level "1" is outputted to signal-line 20a, and CML is turned on.

[0053] In S80, the information on signal-line 22a is inputted, and if it judges whether two or more selective polling reception was chosen, and are chosen and it is not progressed and chosen as S82, it will progress to S92.

[0054] In S82, it judges whether two or more selective polling reception is possible for the destination which inputted the information stored in the registration circuit 24 through signal-line 24a, and carried out call origination now, progresses that it is possible to S84, and progresses that it is impossible to S88.

[0055] In S84, the information on signal-line 22a is inputted, and assignment of two or more selective polling reception is memorized. In S86, S20 to S40 mentioned above is

performed. Here, if two or more multi-polling reception is chosen from an operator during the communication link of S20 to S34, it memorizes.

[0056] Moreover, in S88, the purport in which two or more selective polling reception is impossible is displayed on a display 26 through 20f of signal lines. In addition, this display is eliminated by a certain key stroke. Next, the activation of S54 to S66 mentioned above is expressed with S90. It progresses to S58, after performing [ of S66 ] here.

[0057] Moreover, a DIS (CSI) signal is received in S92. In S94, the destination which carried out call origination to the registration circuit 24 now by x bits of FIF of a DIS signal registers the existence of the function of two or more selective polling communication links. Here, if x bits of FIF of a DIS signal are 1, it will register with those with functional, and if x bits of FIF of a DIS signal are 0, it will register having no function.

[0058] In S96, x bits of FIF of a DIS signal are 1, or it judges whether the partner polling transmitter has the function of two or more polling communication links, if x bits of FIF of a DIS signal have two or more selective polling communication facility, it will progress to S100, and 1, i.e., a partner polling transmitter, will progress to S98, if x bits of FIF of a DIS signal do not have the selective polling communication facility of plurality [ 0 / , i.e., a partner polling transmitter, ].

[0059] In S98, S54 and S58 to S64 which were mentioned above is performed. Here, if the information on signal-line 22a is inputted and multi-polling reception is chosen, the purport for which two or more selective polling reception is improper will be displayed on a display 26 through 20f of signal lines. In addition, this display is eliminated by a certain key stroke.

[0060] In S100, S24 to S34 mentioned above is performed. Here, this will be memorized, if the information on signal-line 22a is inputted and multi-polling reception is chosen from an operator.

[0061] Drawing 8 is the block diagram showing the facsimile apparatus of the 3rd example of this invention.

[0062] In order to use a telephone network for data communication etc., it connects with the terminal of the circuit, and perform connection control of a telephone-exchange network, a change on a data communication way is performed, or NCU (network control unit)102 holds a loop formation. Moreover, NCU102 will connect telephone-line 102a to a telephone 104 side, if the signal level (signal-line 120a) from a control circuit 120 is "0", and if signal level is "1", it will connect telephone-line 102a to a facsimile apparatus side. In addition, telephone-line 102a is connected to the telephone 104 side in the normal state.

[0063] The signal of a transmitting system and the signal of a receiving system are separated, and a hybrid circuit 106 is NCU102 course, sends out the sending signal from an adder circuit 112 to telephone-line 102a, it is a receipt and signal-line 106a course in NCU102 course, and sends the signal from the other party to modulator and demodulator 108.

[0064] Modulator and demodulator 108 perform ITU-T recommendation V.8, V.21, V.27ter, V.29, V.17, the modulation based on V.34, and a recovery, and each transmission mode is specified by signal-line 120c. This modulator and demodulator 108 input the signal currently outputted to signal-line 120b, input the input signal which outputs modulation data to signal-line 108a, and is outputted to signal-line 106a, and output recovery data to signal-line 108b.

[0065] It is the circuit which sends out an ANSam signal, the ANSam sending-out



circuit 110 sends out an ANSam signal to signal-line 110a, when the signal of signal level "1" is outputted to 120d of signal lines, and when the signal of signal level "0" is outputted to 120d of signal lines, it outputs no signals to signal-line 110a.

[0066] An adder circuit 112 outputs the result of having inputted and added the information on signal-line 108a, and the information on signal-line 110a to signal-line 112a. The reading circuit 114 outputs the image of a manuscript to read, and outputs this read image data to signal-line 114a. A record circuit 116 records the information currently outputted to signal-line 120e for every line one by one.

[0067] Since the raw information on read data or the encoded information is stored and receipt information or the decrypted information is stored, a memory circuit 118 is used.

[0068] If a call origination instruction pulse occurs in 120g of signal lines, the call origination circuit 122 will input the telephone number information currently outputted to 120f of signal lines, and will output a selection signal to signal-line 102b.

[0069] A control unit 124 has an one-touch dial, abbreviated dialing, a ten key, a timer polling receiving selection key, a time-of-day setting key, a polling receiving selection key, an SEP signal input key, and other function keys, and the pushed key information is outputted to signal-line 124a. It is the lamp which means receiving the input of the SEP signal of polling reception further in 1 communication link, if the signal of signal level "1" is outputted to 120h of signal lines, a lamp will light up, and if the signal of signal level "0" is outputted to 120h of signal lines, a lamp will switch off a lamp 126.

[0070] A control circuit 120 performs control which changes the notice of whether to require two or more selective polling reception from a polling receiver by timer polling reception or real-time polling reception in the 3rd example of this invention.

[0071] At the time of timer polling reception, when one selective polling is chosen in the polling receiver side, specifically, two or more selective polling reception is not required of a polling transmitter side. Moreover, when two or more selective polling is chosen, two or more selective polling reception is required of a polling transmitter side.

[0072] On the other hand, at the time of real-time polling reception, when it is which when one selective polling is chosen in the polling receiver side, in case two or more selective polling is chosen, two or more selective polling reception is required of a polling transmitter side.

[0073] Drawing 9 - drawing 12 are flow charts which show the control flow of the control circuit 120 in the 3rd example of this invention.

[0074] In drawing 9, S200 expresses the start. In S202, a signal is outputted to signal level "0" at signal-line 120a, and CML is turned off. Output a signal at signal level "0", send out an ANSam signal, and there is nothing to 120d of signal lines S204. In S206, a signal is outputted to 120h of signal lines at signal level "0", and the polling reception reception lamp 126 is switched off.

[0075] The information on signal-line 124a is inputted, it judges whether selection of timer polling reception was performed, in S208, if chosen, it will progress to S210, and the information on signal-line 124a is inputted, the call origination destination which carries out polling reception, the time of day which performs polling reception, and a selective polling signal (SEP signal) (this can also carry out a multiple input) are inputted from a control unit, and it progresses to S212 after this. Moreover, if not chosen, it will progress to S212 as it is.

[0076] In S212, timer polling reception is registered, and it judges whether the time of day which performs this came, progresses that it is YES to S244, and progresses that

it is NO to S214.

[0077] In S214, if the signal of signal-line 124a is inputted and it judges whether polling reception was chosen, and are chosen and it is not progressed and chosen as S218, it will progress to S216 and others will be processed.

[0078] In S218, a signal is outputted to 120h of signal lines at signal level "0", and the lamp 126 showing the purport which can receive polling reception further in this one communication link is turned on.

[0079] In S219, after outputting the specified telephone number to 120f of signal lines, a pulse is generated and call origination of the call origination instruction is carried out to 120g of signal lines to the specified destination. 1 is set to the text number k which performs selective polling reception in S220. In S222, a signal is outputted to signal level "1" at signal-line 120a, and CML is turned on.

[0080] A DIS (CSI) signal is received in S224. Here, x bits of FIF of a DIS signal which receives are assumed to be 1. And it expresses that two or more selective polling transmission within 1 communication link is possible for a polling transmitter in x bits of FIF of a DIS signal being 1, and expresses that two or more selective polling transmission within 1 communication link is impossible for a polling transmitter in x bits of FIF of a DIS signal being 0. This control is memorized, if the information on signal-line 124a is inputted and two or more selective polling is chosen from a control unit.

[0081] A SEPk(PWDk) (CIG) DTC signal is transmitted in S226. Here, the purport which wants to set [ purport ] x bits of FIF of a DTC signal to 1, and to carry out two or more selective polling reception to a polling transmitter in 1 communication link is required. After completing polling transmission of the text as which the polling transmitter was specifically specified, if selective polling transmission specified here when the EOS signal was transmitted and the SEPk(CIG) DTC signal was received after this is carried out and an MCF signal is received, it will become disconnection, without transmitting an EOP signal.

[0082] Moreover, x bits of FIF of a DTC signal do not require a purport to carry out two or more selective polling reception in 1 communication link to a polling transmitter by it being \*\* 0. Specifically, a polling transmitter transmits an EOP signal after completing polling transmission of the specified text. It memorizes, if the information on signal-line 124a is inputted also in S226 and two or more selective polling is chosen from a control unit.

[0083] A Tr-TCF signal is received in reception of a DCS signal, and S230, and a CFR signal is transmitted by S232 S228 (TSI). Also in these control, if the information on signal-line 124a is inputted and two or more selective polling is chosen from a control unit 124, it memorizes.

[0084] In S234, polling information specified with the SEPk signal is received. Here, two or more reception is also possible. It memorizes, if the information on signal-line 124a is inputted also in S234 and two or more selective polling is chosen from a control unit 124.

[0085] S236 expresses reception of an EOS signal. It memorizes, if the information on signal-line 124a is inputted in S236 and two or more selective polling is chosen from a control unit 124.

[0086] In S238, if it judges whether there is any information which has not carried out polling reception yet and which carries out selective polling, it will progress to S242, and one value of the text number k is incremented and it progresses to S226.

Moreover, if there is nothing, it will progress to S240, and an MCF signal is

transmitted and it progresses to S202.

[0087] In S244, if it judges whether two or more selective polling reception is chosen, it is chosen and it is not progressed and chosen as S246 in 1 communication link, it will progress to S248.

[0088] In S246, control of S219 to S240 mentioned above is performed. Here, all the inputs from the control unit 126 of two or more selective polling are considered as prohibition.

[0089] Moreover, in S248, a call origination instruction pulse is generated in 120g of signal lines after outputting the specified telephone number to 120f of signal lines, and call origination is carried out to the destination specified from the call origination circuit 122. In S250, the signal of signal level "1" is outputted to signal-line 120a, and CML is turned on.

[0090] A DIS (CSI) signal is received in S252, and an SEP(PWD) (CIG) DTC signal is transmitted in S254. Here, x bits of FIF of a DTS signal are set to 0.

[0091] A Tr-TCF signal is received in reception of a DCS (TSI) signal, and S258, and a CFR signal is transmitted by S260 S256. In S262, polling information specified with the SEP signal is received. Here, of course, two or more reception is also possible.

[0092] An EOP signal is received in S264. And in S266, an MCF signal is transmitted and it progresses to S202.

[0093] Next, while carrying out two or more selective polling reception by timer polling reception, you may make it receive the selective polling reception under same communication link as the 4th example of this invention. What is necessary is just to specifically change in S246 of the 3rd example mentioned above, so that S218 to S240 may be performed.

[0094] In addition, although the above example explained stand-alone type facsimile apparatus to the example, as for this invention, it is needless to say that it can apply to not only this but a copy function, an electronic file function, and the data communication control in the synthetic data processing system which compounded the data processing function with communication facility further. Moreover, it is applicable not only to the above pictorial communications but various data communication.

[0095]

[Effect of the Invention] As explained above, when according to the 1st of this application - the 5th invention it was going to receive two or more selective polling from the terminal in which two or more selective polling communication links are possible and the polling transmitter side did not have the function, that was displayed on the user, the user specified one selective polling by easy actuation, without reinputting selective polling, it became possible and it became very convenient to carry out polling reception.

[0096] Moreover, since a setup of the selective polling after the 2nd cannot be performed but that can be further displayed on an operator when according to invention of the 3rd of this application a user chooses two or more selective polling after call origination and two or more selective polling transmitting functions cannot be found in a polling transmitter side, there is no misunderstanding of a user and it can offer the equipment which is easy to use.

[0097] Moreover, according to invention of the 4th of this application, corresponding to the call origination point, the registration information on whether two or more selective polling communication links are possible can be updated to the newest thing, and adequate decision is attained.

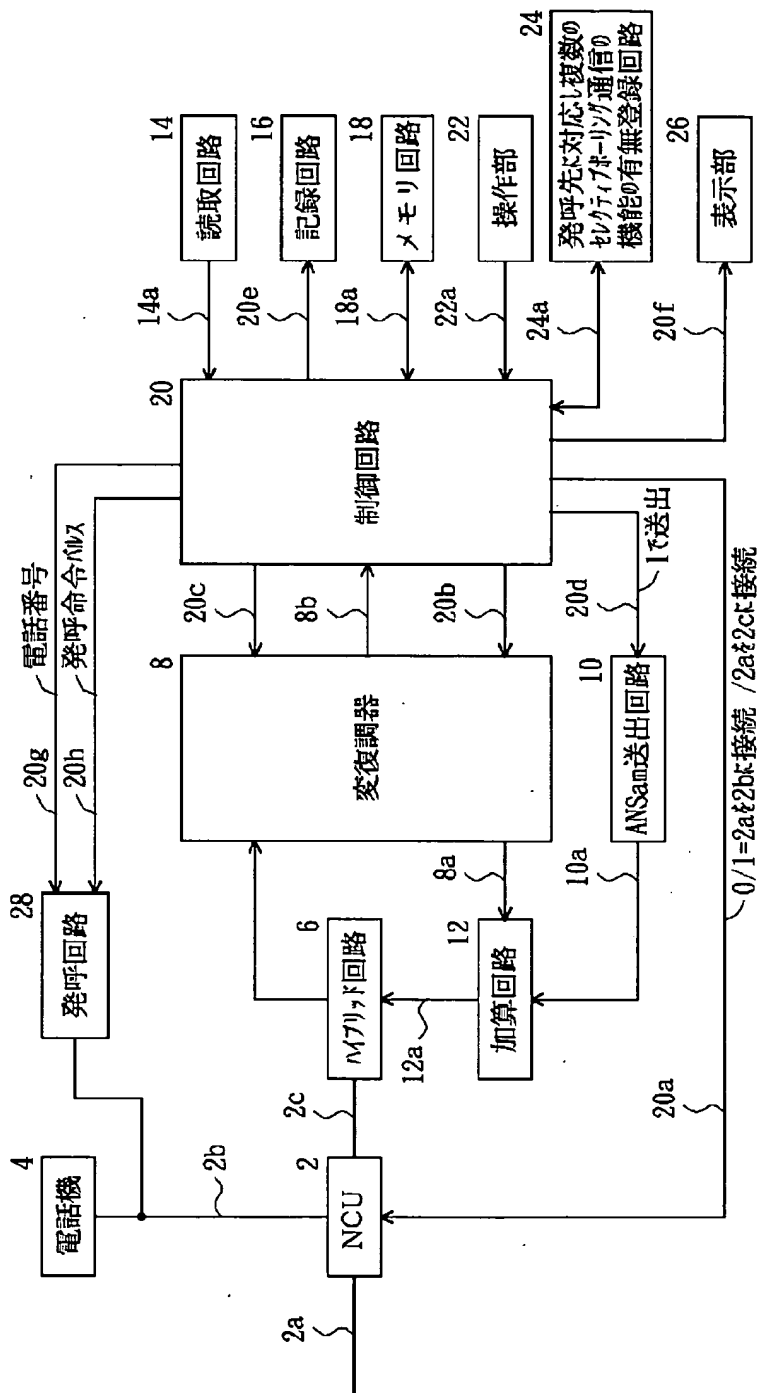
[0098] [ when one selective polling is chosen according to the 6th of this application -

the 9th invention ] moreover, at the time of real-time polling reception Since the addition of the selective polling reception from the communication link middle is enabled and the help is not minded on the other hand at the time of timer polling reception by requiring two or more selective polling reception of a polling transmitter side, Since it judges that there are few additions of the selective polling reception from the communication link middle and was made not to require two or more selective polling reception, it becomes the existing protocol and the fault on a protocol can be suppressed very few.

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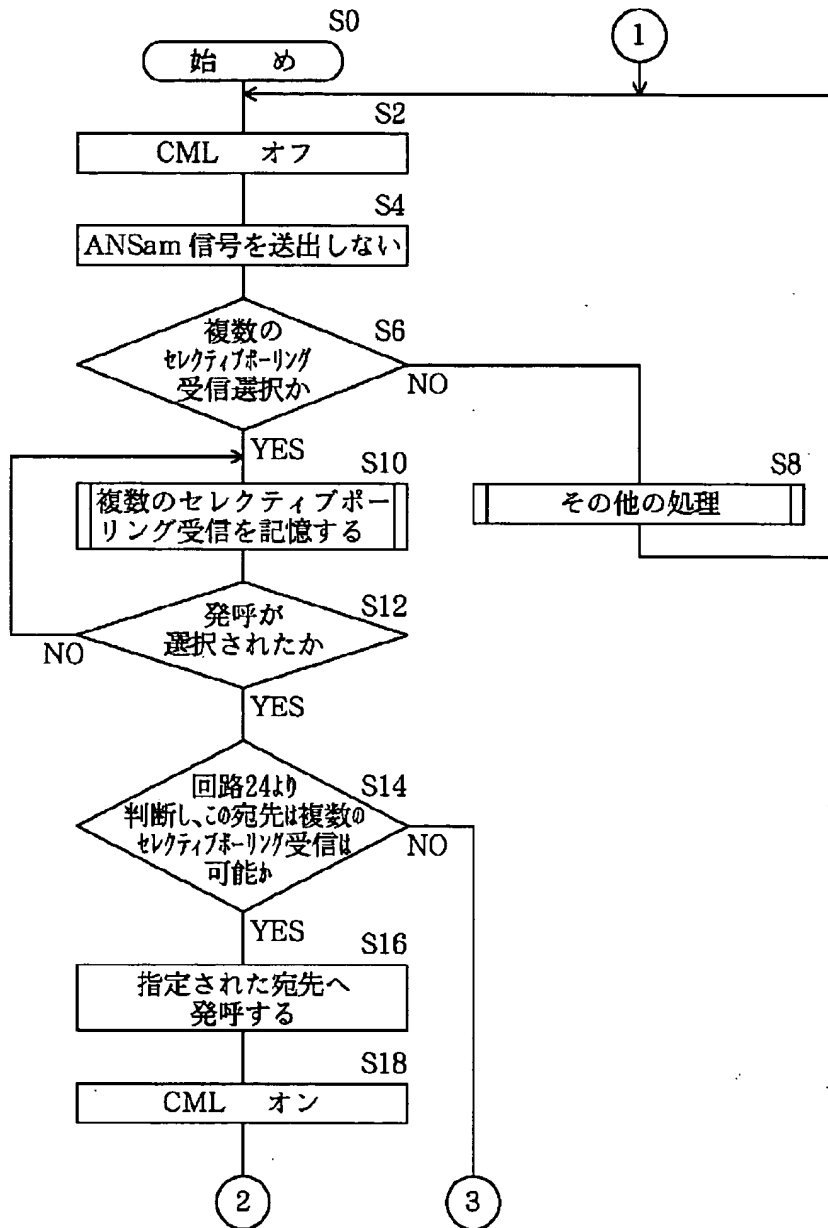
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【図1】



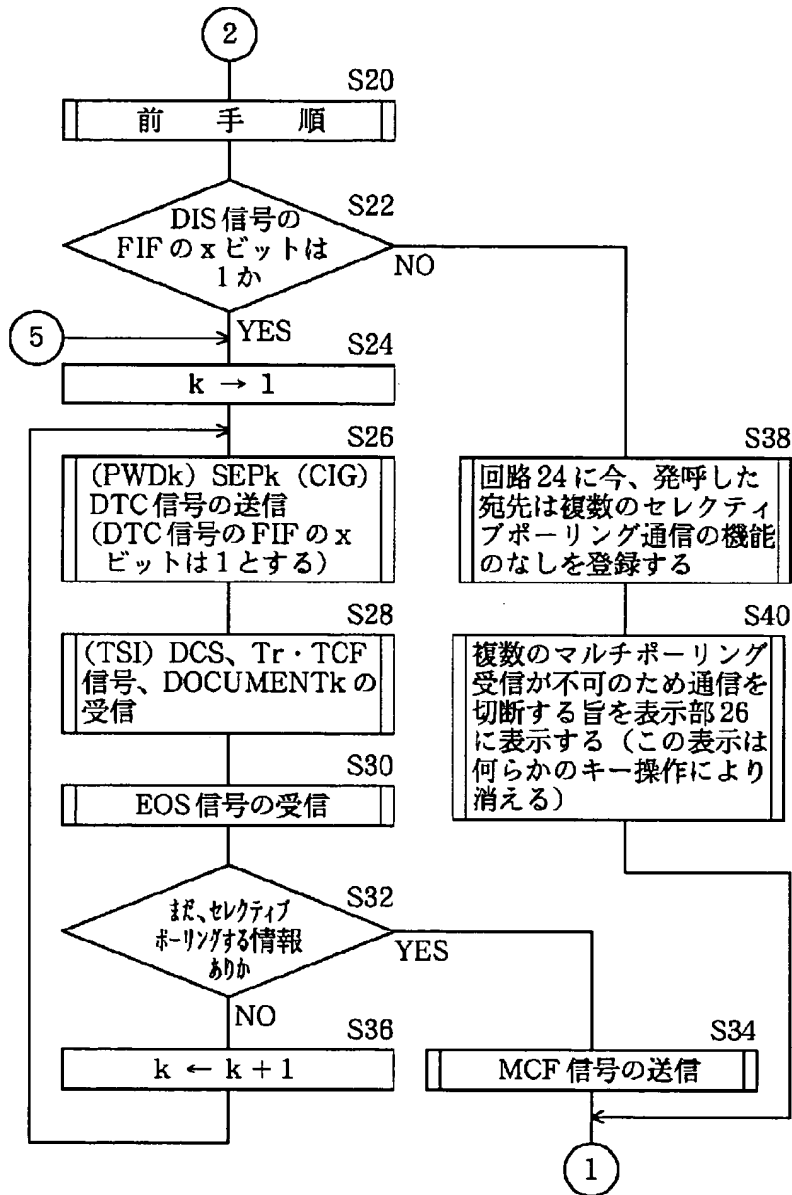
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【図2】



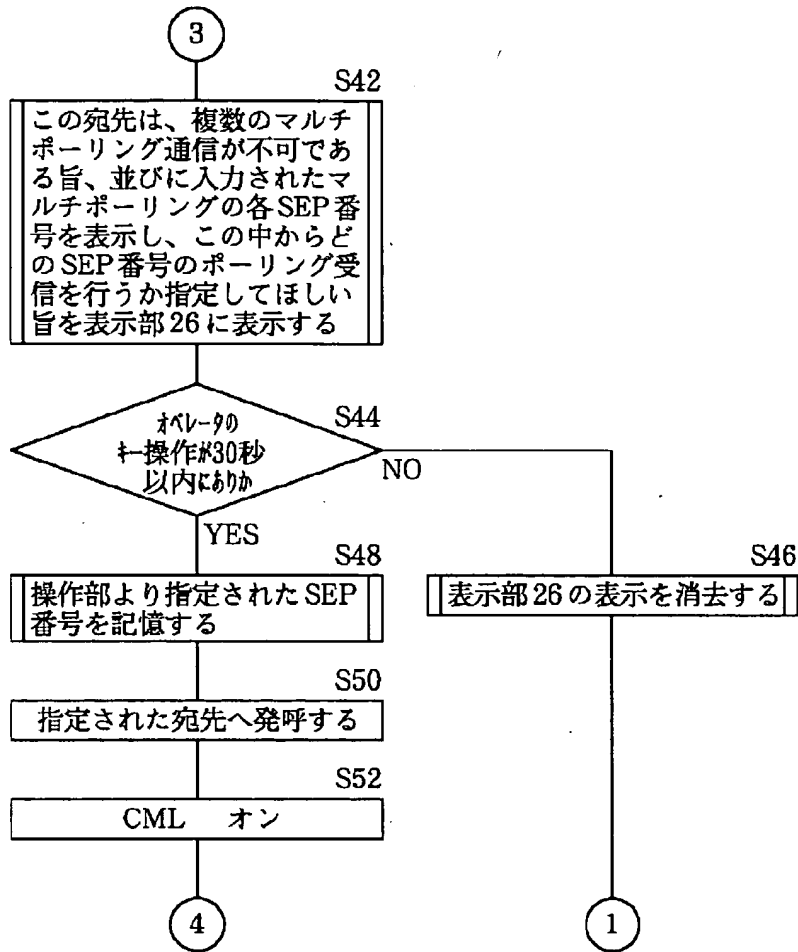
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【図3】



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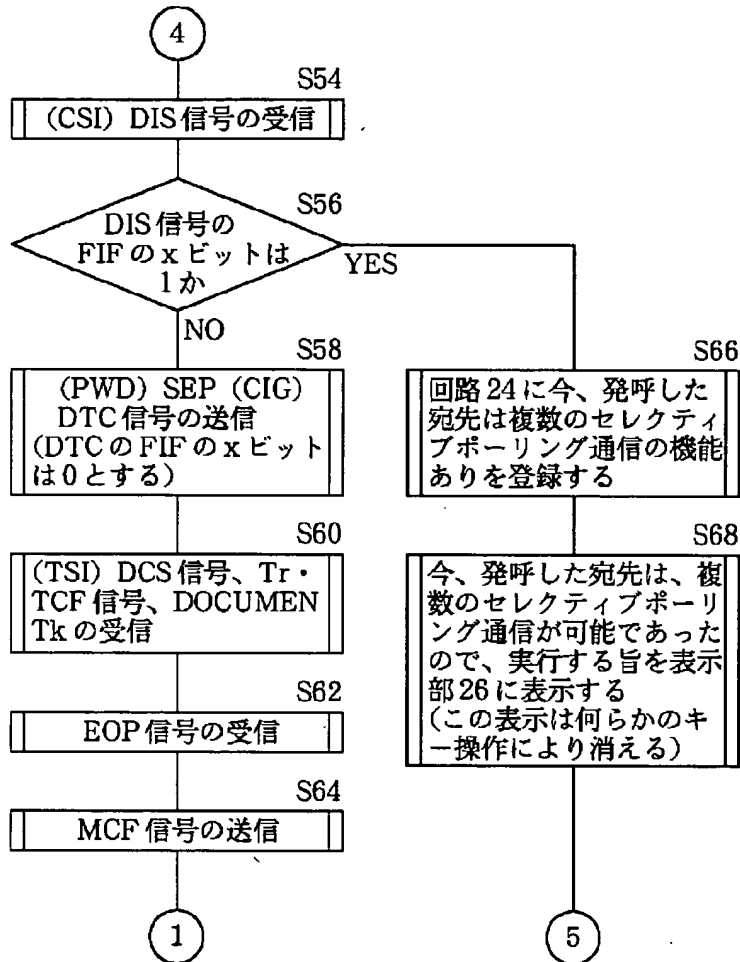
【図4】



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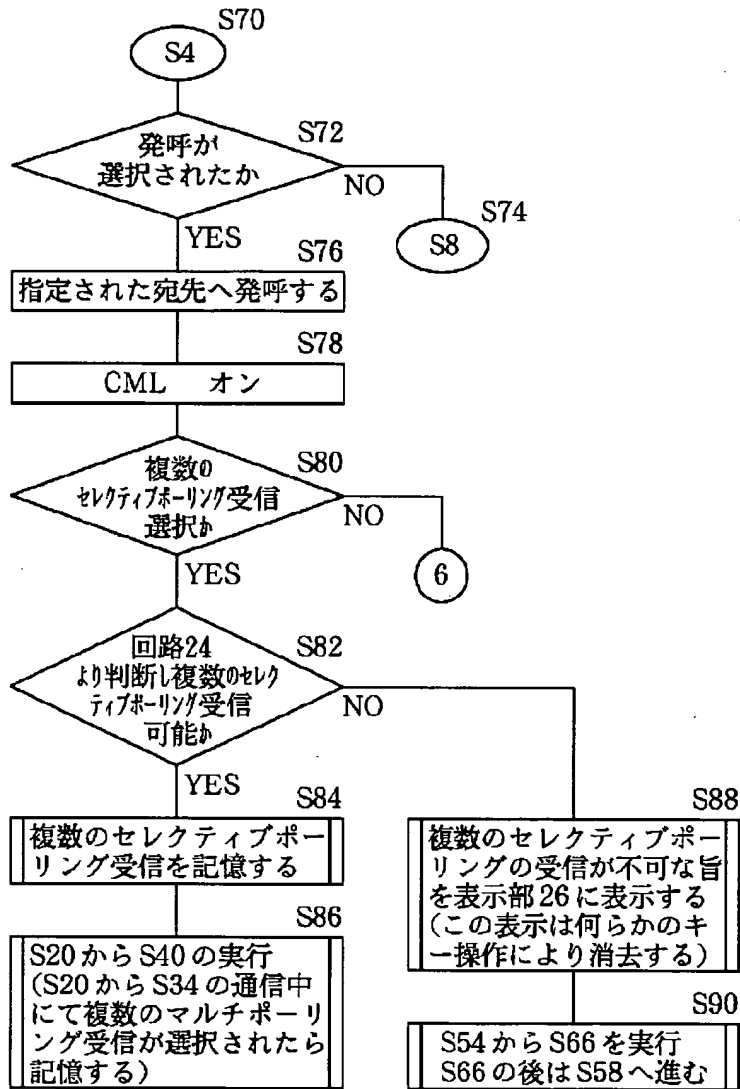


【図5】



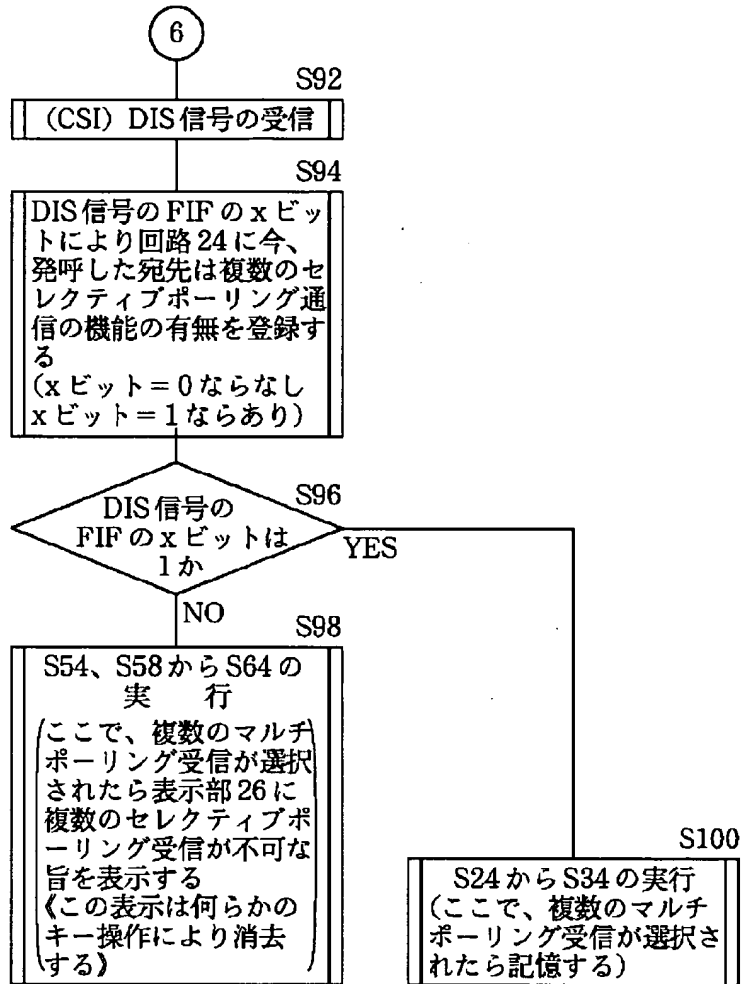
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【図6】



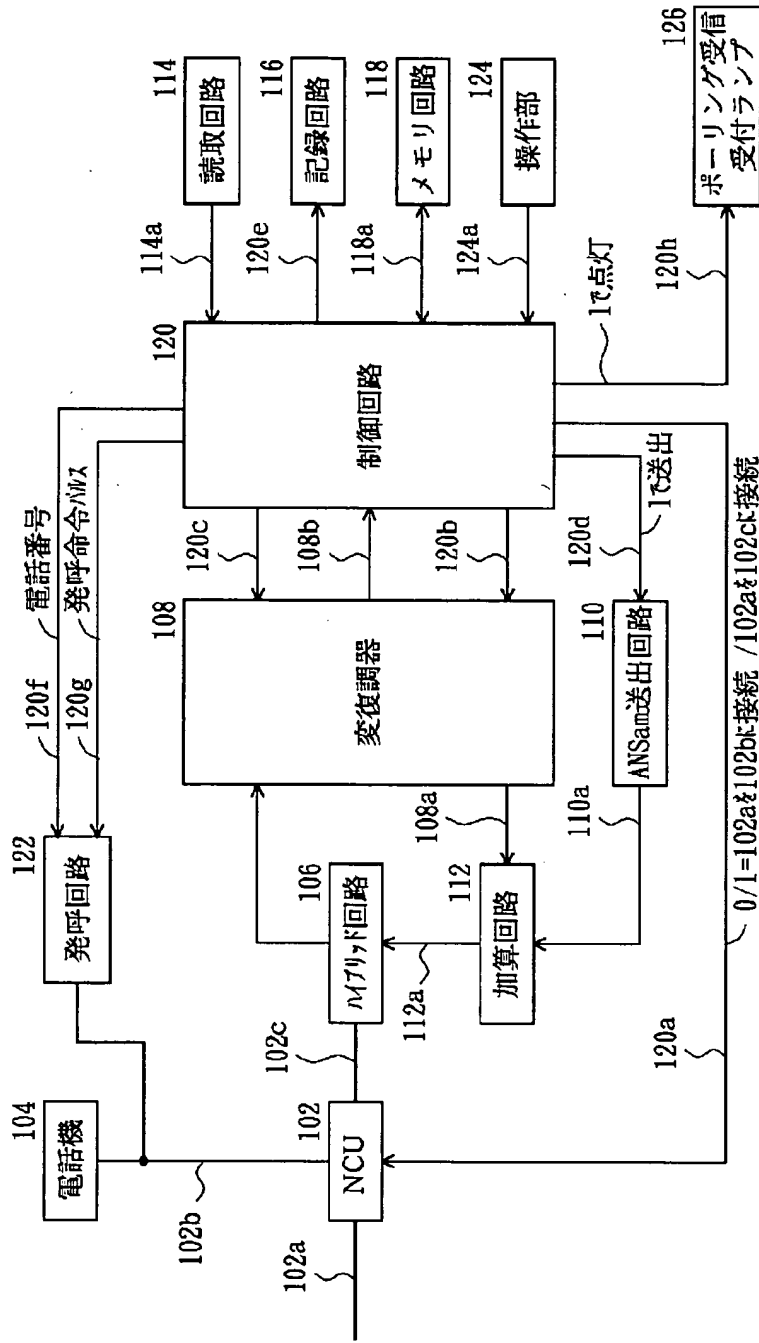
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【図7】



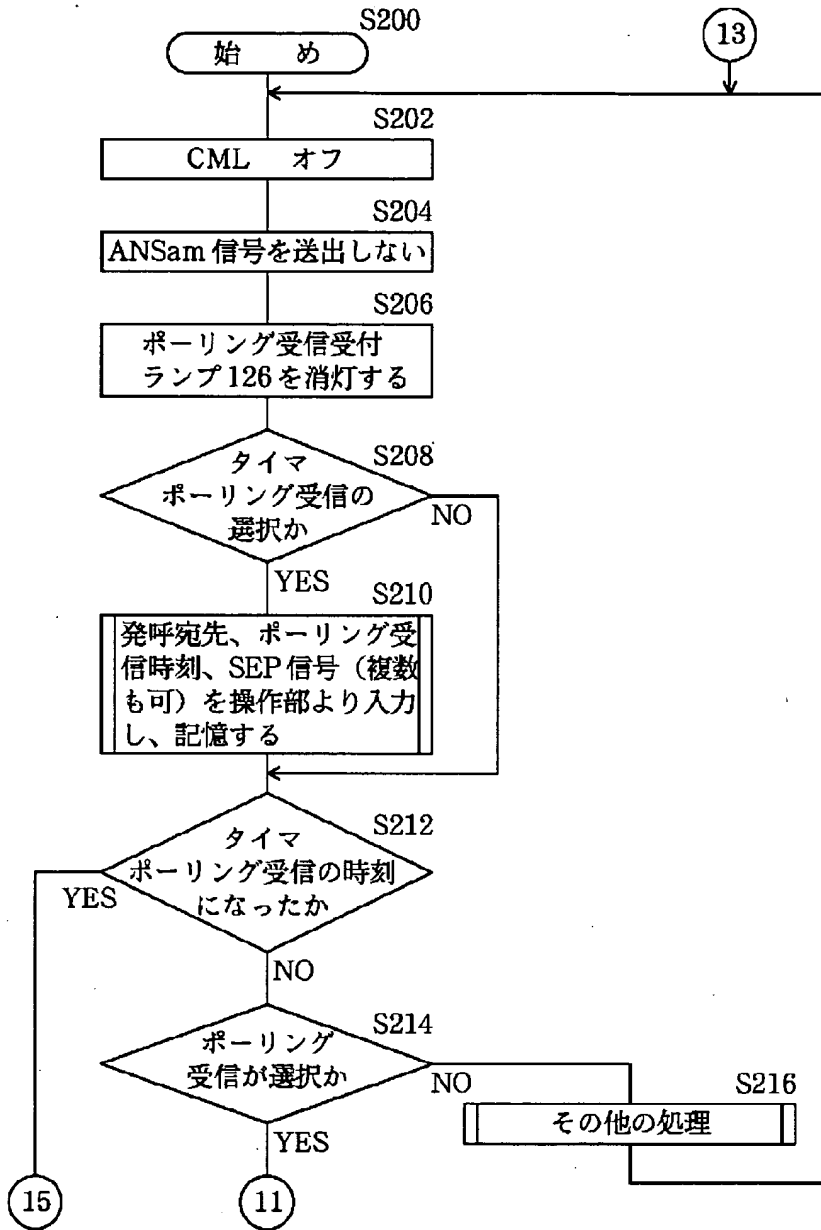
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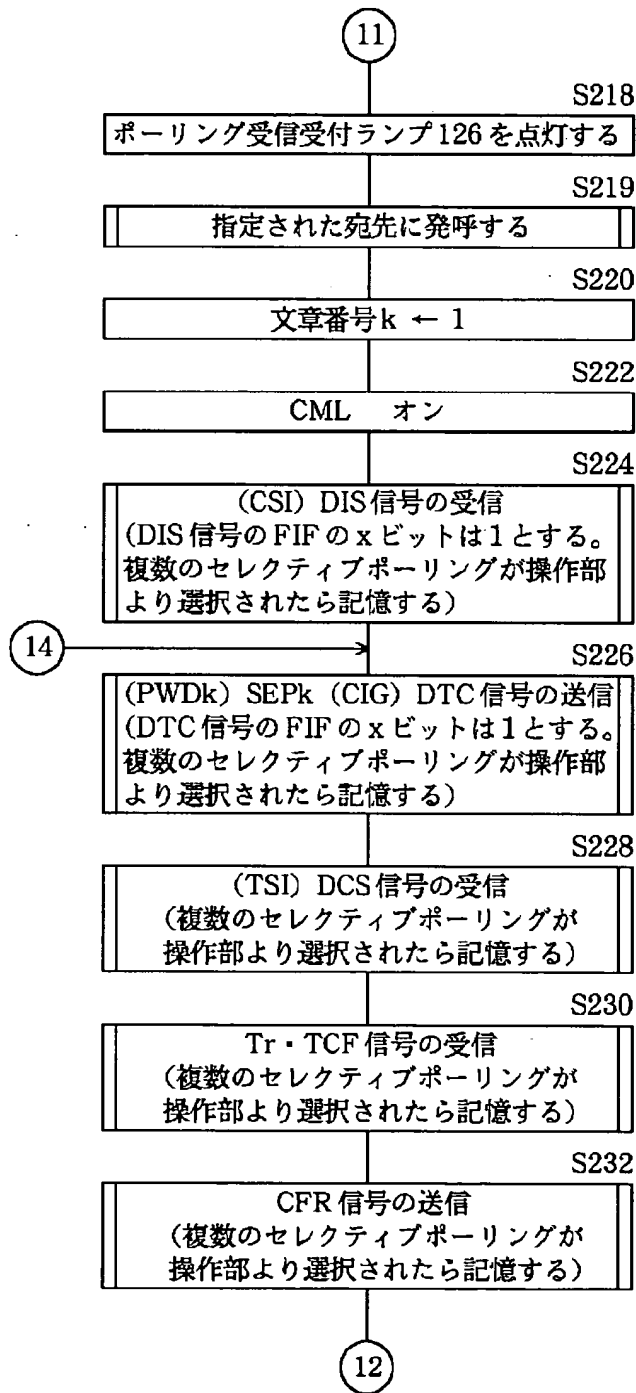
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【図9】



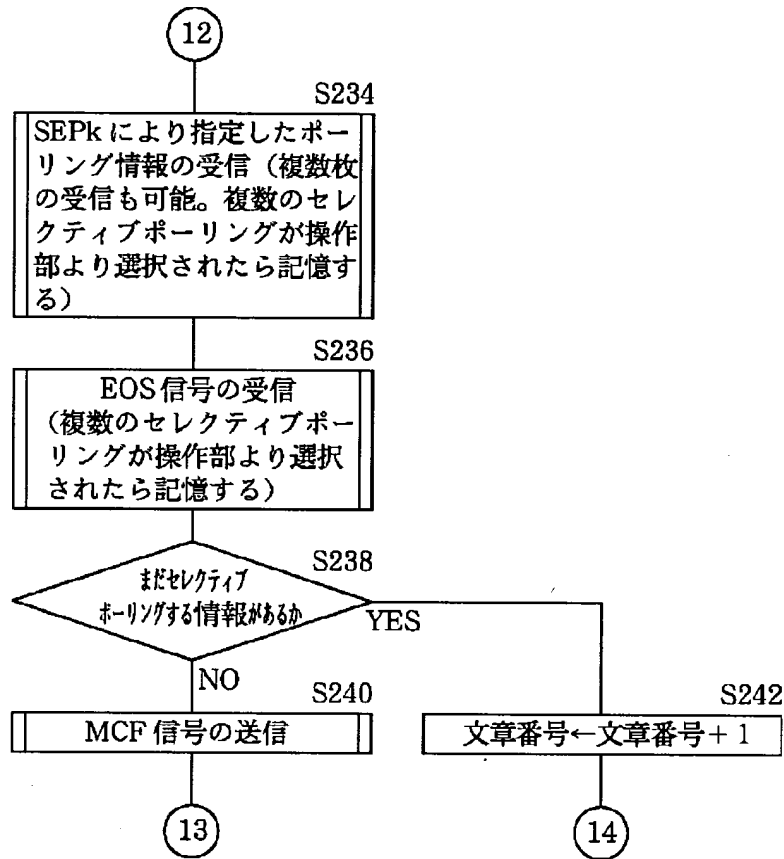
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【図10】



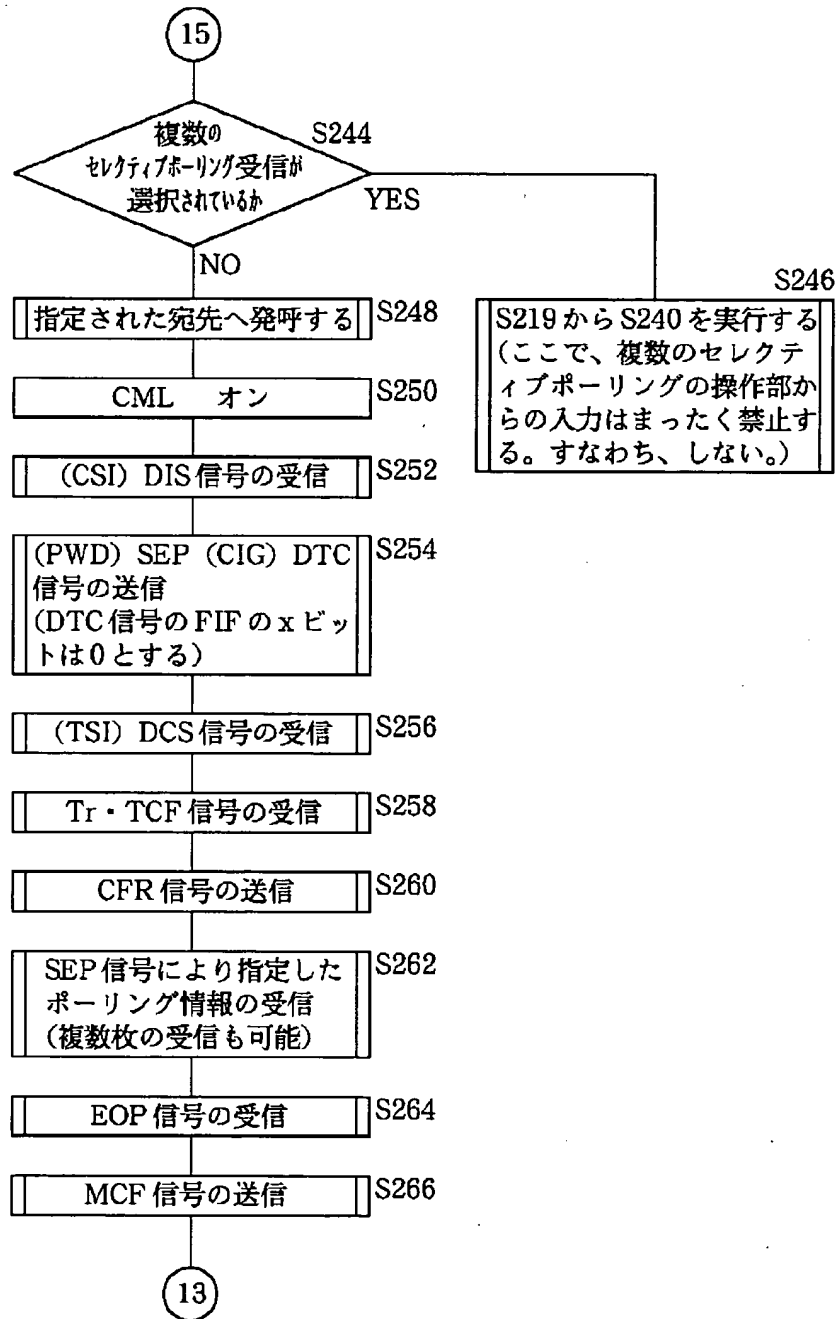
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【図11】



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【図12】



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